

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
FACT SHEET
(pursuant to NAC 445A.236)

Permittee Name: Mr. Gasket, Incorporated
550 Mallory Way
Carson City, Nevada 89701

Permit Number: NV021512

Location: 550 Mallory Way
Carson City, Nevada 89701

Latitude: 39° 09' 14" N.
Longitude: 119° 45' 39" W.

General:

Mr. Gasket, a manufacturer of performance auto parts, operates a facility in Carson City, originally used by their subsidiary, Mallory Inc., for the production of performance ignition systems. During the early period of operation, Mallory Inc. impacted the groundwater below the site and down-gradient with chlorinated hydrocarbons. In 1988, Mr. Gasket (Mallory) initiated groundwater remediation activities for the removal and recovery of chlorinated hydrocarbons, using an air stripping/activated carbon groundwater treatment system with a maximum capacity of 30 gallons per minute (gpm). The groundwater recovery system consists of three (3) recovery wells. Plume boundaries were originally estimated to extend approximately 850 feet in a northeast direction, migrating across Carson City Governor's Field toward Linear Ditch. Since September 1989, discharge from the on-site pump-and-treat remediation system has been discharged to Linear Ditch, which ultimately discharges to the Carson River.

Receiving Water Characteristics:

Treated groundwater is discharged from the air stripping/carbon polish system to a nearby stormdrain leading to Linear Ditch. Studies have indicated that Linear Ditch is a losing stream downstream of the Mr. Gasket storm drain discharge location, and recharges groundwater. Relatively long periods of losing conditions were substantiated by: (1) pumping within the remediation target area had effectively lowered the groundwater table and increased the head differential between the Ditch and the groundwater, and (2) dry-ditch conditions within 1 to 2 miles downstream of the Mr. Gasket discharge frequently occur due to the ephemeral nature of the losing stream (Linear Ditch).

The Mr. Gasket treatment system discharges to the Linear Ditch, ultimately flowing to the Carson River. The Carson River has assigned water quality standards, and therefore, tributary systems contributing to the Carson River are subject to these water quality criteria. The upstream and downstream water quality control points for the discharge are New Empire and Mexican Ditch, respectively, as listed in Nevada Administrative Code (NAC) 445A.155. The beneficial uses for the Carson River are: Irrigation; Watering of livestock; Recreation involving contact with the water; Recreation not involving contact with water; Industrial supply; Municipal or domestic supply, or

both; Propagation of wildlife; and Propagation of aquatic life. For the reach of the Carson River in question, the species of major concern are smallmouth bass, rainbow trout and brown trout.

Pertinent water quality and flow monitoring data for the Carson River at the Mexican Ditch Gage station from June 1996 through November 2005 have been reported as the following:

Parameter	Maximum	Minimum	Average	Water Quality Standards (per NAC 445A.154)
Total Nitrogen (mg/l)	1.2	0.18	0.5	Annual Avg ⁽²⁾ : ≤ 1.3 Single Value ⁽²⁾ : ≤ 1.7
Nitrate as N (mg/l)	0.2	<0.1	0.1	Single Value ⁽¹⁾ : ≤ 10
Nitrite as N (mg/l)	0.01	<0.01	<0.01	Single Value ⁽¹⁾ : ≤ 0.06
Total Dissolved Solids (mg/l)	488	56	192	Annual Avg ⁽¹⁾ : ≤ 500
Total Phosphate as P (mg/l)	0.5	0.07	0.2	Annual Avg ⁽¹⁾ : ≤ 0.10
pH (Standard Units)	9.0	7.5	8.1	6.5 to 9.0 ⁽¹⁾
Flow (CFS)	1616	10	101 ⁽³⁾	NA

(1) Water Quality Standard for Beneficial Use.

(2) Requirements to Maintain Existing Higher Quality.

(3) Average Carson River flow of 101 CFS= 45,283.9 gallons per minute

Discharge Flow and Characteristics

During the period from October, 2001 through March, 2006, the average monthly discharge from the Mr. Gasket treatment unit ranged from 0.0037 MGD to 0.0257 MGD. During that period, the highest daily discharge reported was 0.0494 MGD. The flow exceeded the permit limit on one occasion. On average, the daily maximum flow reported was 0.0248 MGD.

During the period noted above, the discharge from the treatment system has the following characteristics:

Parameter	Maximum	Minimum	Average	Permit Limit
1,1,1 Trichloroethane (mg/l)	0.006	ND	ND	0.20
Trichloroethene (mg/l)	ND	ND	ND	0.005
1,1 Dichloroethane (mg/l)	ND	ND	ND	0.02
1,2 Dichloroethane (mg/l)	ND	ND	ND	0.005
1,1 Dithloroethene (mg/l)	ND	ND	ND	0.007
Cis-1-2 Dichloroethene (mg/l)	ND	ND	ND	0.07
Carbon Tetrachloride (mg/l)	ND	ND	ND	0.005
Toluene (mg/l)	ND	ND	ND	0.012
Total Phosphate as P (mg/l)	1.9	0.12	0.39	M & R
Total Nitrate as N (mg/l)	10.0	6.2	7.6	M & R
Total Dissolved Solids (mg/l)	955	750	870	M & R
pH (Standard Units)	8.7	8.13	8.36	Between 6 and 9

M & R = Monitor and Report

ND = Non Detect at detection limit of 0.005 mg/l

Discharge from the treatment system has consistently met permit limitations for volatile hydrocarbons. However, elevated concentrations of nitrate, phosphate, and total dissolved solids (TDS) have been reported in the discharge. These constituents are believed to be from historical septic tanks, leach fields, and other nonpoint sources in the area, and have not been attributed to the Mr. Gasket site contamination. Because the highest reported flow (34.3 gallons per minute) from the Mr. Gasket facility constitutes only 0.8% of the lowest reported Carson River stream flow (4488 gallons per minute), it is believed that the Mr. Gasket discharge will not significantly impact the Carson River water quality due to these constituents.

Proposed Effluent Limitations, Monitoring Requirements and Special Conditions:

Effluent discharge compliance samples shall be collected at the end-of-pipe (Outfall 001) discharging to the stormdrain that leads to the Linear Ditch. Discharge from the treatment system shall be limited and monitored according to the following:

EFFLUENT DISCHARGE LIMITATIONS

PARAMETER	DISCHARGE LIMITATIONS		MONITORING REQUIREMENTS	
	30 - Day Average	Daily Maximum	Measurement Frequency	Sample Type
Flow (MGD)	Monitor & Report	0.0432	Continuous	Flow Meter
1,1,1-Trichloroethane (mg/L)	---	0.200	Monthly	Discrete
Trichloroethene (mg/L)	---	0.005	Monthly	Discrete
1,1-Dichloroethane (mg/l)	---	0.020	Monthly	Discrete
1,2-Dichloroethane (mg/l)	---	0.005	Monthly	Discrete
1,1-Dichloroethene (mg/l)	---	0.007	Monthly	Discrete
Cis-1,2-Dichloroethene (mg/L)	---	0.070	Monthly	Discrete
Carbon Tetrachloride (mg/l)	---	0.005	Monthly	Discrete
Toluene (mg/l)	---	0.012	Monthly	Discrete
Total Phosphorus (P) (mg/L)	Monitor & Report		Monthly	Discrete
Total Nitrates as Nitrogen (N) (mg/L)	Monitor & Report		Monthly	Discrete
Total Dissolved Solids (TDS) (mg/L)	Monitor & Report		Monthly	Discrete
pH (Standard Units)	6.5 to 9.0		Monthly	Discrete

MGD: Million gallons per day

mg/L: Milligrams per liter

Schedule of Compliance

The Permittee shall achieve compliance with the effluent limitations upon issuance of the permit.

Rationale for Permit Requirements:

Permit requirements are designed to be consistent with drinking water quality and/or the Carson River Water Quality Standards, as applicable.

Flow:

The discharge flow rate is limited by the design capacity of the treatment system. Maximum flow is permitted at 30 gpm, equating to 0.0432 MGD.

Volatile Hydrocarbon and Chlorinated Hydrocarbon Compounds:

Discharge limitations for Trichloroethene, and its degradation products 1,1,1-Trichloroethane and Cis-1,2-Dichloroethene, are based on primary drinking water standards. These analytes are tested for using the EPA 8260 testing protocol. Monthly monitoring for other hydrocarbons of interest in previous permits (1,1-Dichloroethane, 1,2-Dichloroethane, 1,1-Dichloroethene, Carbon Tetrachloride, and Toluene) have been continued in this permit renewal because these constituents included in the full 8260 analysis and nothing would be gained from dropping them.

Total Phosphates, Nitrate, and Total Dissolved Solids:

Water samples collected from the Linear Ditch upgradient from the Mr. Gasket discharge have exhibited nutrient concentrations at or above water quality standards for the Carson River, as listed in NAC 445A.154. Total Phosphates, Nitrate, and Total Dissolved Solids shall be monitored and reported to ensure that the Mr. Gasket discharge does not significantly contribute to any increase of these constituents in the Carson River.

pH:

pH will be monitored to ensure the discharge continues to meet Carson River Standards as listed in NAC 445A.154.

Procedures for Public Comment:

Notice of the Division's intent to reissue a permit authorizing the facility to discharge to the waters of the State of Nevada subject to the conditions contained within the permit is being sent to the Nevada Appeal for publication. Anyone wishing to comment on the proposed permit can do so in writing for a period of 30 days following the date of the public notice. The comment period can be extended at the discretion of the Administrator. The comment period ends at **5:00 pm on December 7, 2006.**

A public hearing on the proposed determination can be requested by the applicant, any affected State, any affected interstate agency, the Regional Administrator, or any interested agency, person, or group of persons. The request must be filed within the comment period and must indicate the interest of the person filing the request and the reasons why a hearing is warranted.

Any public hearing determined by the Administrator to be held must be conducted in the geographical area of the proposed discharge or any other area the Administrator determines to be appropriate. All public hearings must be conducted in accordance with NAC 445A.238. The final determination of the Administrator may be appealed to the State Environmental Commission pursuant to NRS 445A.605.

Proposed Determination:

The Division has made the tentative determination to reissue the proposed permit for a five (5)-year period, subject to specified permit limitations and requirements.